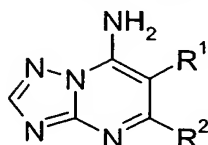


We claim:

1. A triazolopyrimidine of the formula I



in which the substituents are as defined below:

R^1 is C_1 - C_5 -alkyl or C_1 - C_{10} -alkoxy- C_1 - C_{10} -alkyl,

R^2 is C_5 - C_{12} -alkyl,

where R^1 and/or R^2 may be substituted by one to three of the following groups:

cyano, nitro, hydroxyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -alkylthio, NR^aR^b ;

R^a , R^b are hydrogen or C_1 - C_6 -alkyl.

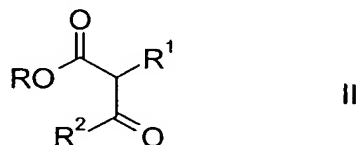
2. The compound of the formula I according to claim 1 in which R^1 and R^2 are unsubstituted and together have at most 14 carbon atoms.

3. The compound of the formula I according to claim 1 in which R^1 is methyl, ethyl, n-propyl, isopropyl, n-butyl or n-pentyl, where the carbon chains are unsubstituted or may be substituted according to claim 1.

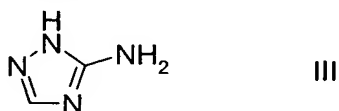
4. The compound of the formula I according to claim 1 in which R^2 is n-heptyl, n-octyl, n-nonyl or 1-methyloctyl.

5. 6-Methyl-5-pentyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Hexyl-6-methyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Heptyl-6-methyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
6-Methyl-5-octyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
6-Methyl-5-nonyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
6-Ethyl-5-octyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
6-Ethyl-5-noctyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Decyl-6-ethyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Octyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Nonyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Decyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine.

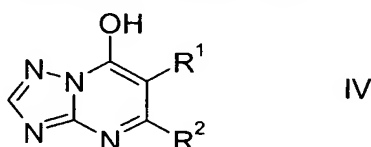
6. A process for preparing compounds of the formula I according to any of claims 1 to 5 wherein β -keto esters of the formula II,



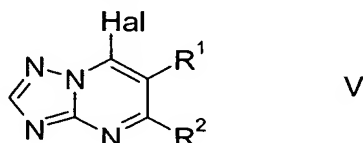
- 5 in which R is C₁-C₄-alkyl are reacted with 3-amino-1,2,4-triazole of the formula III



to give 7-hydroxytriazolopyrimidines of the formula IV



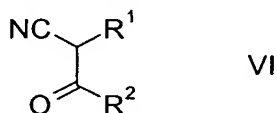
which are halogenated to give compounds of the formula V



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in which Hal is chlorine or bromine, and V is reacted with ammonia.

7. A process for preparing compounds of the formula I according to any of claims 1 to 5 wherein acyl cyanides of the formula VI,



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are reacted with 3-amino-1,2,4-triazole of the formula III according to claim 6.

8. A fungicidal composition comprising a solid or liquid carrier and a compound of the formula I according to any of claims 1 to 5.

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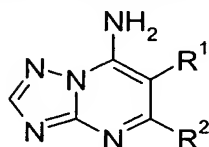
9. Seed comprising a compound of the formula I according to any of claims 1 to 5 in an amount of 1 to 1000 g per 100 kg.

10. A method for controlling phytopathogenic harmful fungi wherein the fungi or the materials, plants, the soil or seed to be protected against fungal attack are treated with an effective amount of a compound of the formula I according to any of claims 1 to 5.

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We claim:

1. A triazolopyrimidine of the formula I



in which the substituents are as defined below:

R^1 is C_1 - C_5 -alkyl or C_1 - C_{10} -alkoxy- C_1 - C_{10} -alkyl,

R^2 is C_5 - C_{12} -alkyl,

where R^1 and/or R^2 may be substituted by one to three of the following groups:

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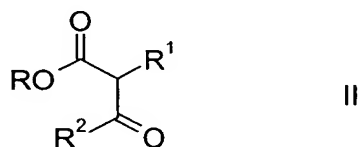
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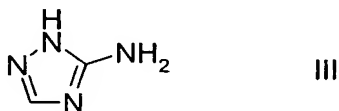
4. The compound of the formula I according to claim 1 in which R^2 is n-heptyl, n-octyl, n-nonyl or 1-methyloctyl.

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5-Hexyl-6-methyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
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6-Methyl-5-nonyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
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5-Octyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Nonyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine;
5-Decyl-6-propyl-[1,2,4]triazolo[1,5-a]pyrimidin-7-ylamine.

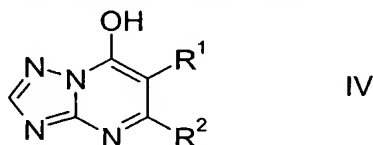
6. A process for preparing compounds of the formula I according to any of claims 1 to 5 wherein β -keto esters of the formula II,



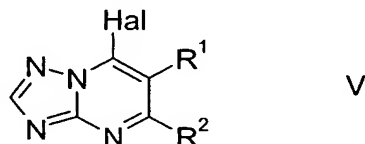
- 5 in which R is $\text{C}_1\text{-C}_4$ -alkyl are reacted with 3-amino-1,2,4-triazole of the formula III



to give 7-hydroxytriazolopyrimidines of the formula IV



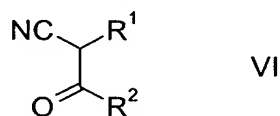
which are halogenated to give compounds of the formula V



10

in which Hal is chlorine or bromine, and V is reacted with ammonia.

7. A process for preparing compounds of the formula I according to any of claims 1 to 5 wherein acyl cyanides of the formula VI,



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are reacted with 3-amino-1,2,4-triazole of the formula III according to claim 6.

8. A fungicidal composition comprising a solid or liquid carrier and a compound of the formula I according to any of claims 1 to 5.

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9. Seed comprising a compound of the formula I according to any of claims 1 to 5 in an amount of 1 to 1000 g per 100 kg.

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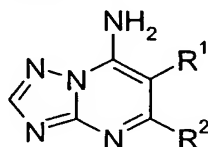
10. A method for controlling phytopathogenic harmful fungi wherein the fungi or the materials, plants, the soil or seed to be protected against fungal attack are treated with an effective amount of a compound of the formula I according to any of claims 1 to 5.

5,6-Dialkyl-7-aminotriazolopyrimidines, their preparation and their use for controlling harmful fungi, and compositions comprising these compounds

Abstract

5

5,6-Dialkyl-7-aminotriazolopyrimidines of the formula I



I

in which the substituents are as defined below:

10 R¹ is alkyl or alkoxyalkyl,

R² is alkyl,

where R¹ and/or R² may be substituted as defined in the description;

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processes for preparing these compounds, compositions comprising them and their use for controlling phytopathogenic harmful fungi.